Data Source: EM CDB Report Number: GEN-01b

Operations/Field Office: Savannah River

Print Date: 3/9/2000

Site Summary Level: Savannah River Site

HQ ID: 0484

Project SR-SW06 / Sanitary Waste Project

## **General Project Information**

## **Project Description Narratives**

#### Purpose, Scope, and Technical Approach:

Sanitary or municipal solid waste is solid waste that is neither radioactive or hazardous as defined by the AEA or RCRA. Sanitary waste consists of materials that would be received by a municipal sanitary landfill and salvageable or recyclable materials such as scrap metal.

DOE-SR and the Lower Savannah Council of Governments have committed to the development and use of the Three Rivers Landfill, which disposes of waste from SRS and eight South Carolina counties. The 1,400 acre site, located off Highway 125 adjacent to the site is the state's first publicly owned, regulated landfill, and is expected to provide safe and efficient disposal capacity for over 200,000 tons of sanitary waste a year for the next 50 years. SRS plans to send about 25 tons of waste per day to this new landfill. Because of this commitment, no other options for the disposal of sanitary waste will be considered.

Waste minimization and pollution prevention activities conducted on-site include recycling of aluminum cans and white office paper, salvage yard recycling of usable materials, scrap wood chipping and burning, construction material recycling, and off-site sale of paint and paint products. Other recycling activities are being pursued through the City of North Augusta Material Recovery Facility.

In December 1997, an initial load of sanitary waste was processed at the Material Recovery Facility to determine potential recycling and cost-savings opportunities. The recyclables recovered from this test load included white office paper, newspaper and magazines, cardboard, plastic, steel cans, aluminum cans, and glass. The residual materials that were not recyclable were disposed in a landfill. The cost to process this waste at the Material Recovery Facility and capture additional materials for recycling was compared to the cost to dispose of all of this waste, which would normally have been the case. Based on the results of this test case, the total anticipated savings for this new program is about \$323,000 per year. Sanitary waste has been routed to this facility since the opening of the Three Rivers Landfill in July 1998.

Early in fiscal year 1999, the combustible portion of the sanitary waste stream (roughly about 75%) is being evaluated to go to a subcontractor to produce fuel cubes that will be used to fire the A-Area boiler. This program teams with local industry (Kimberly Clark, Ponderosa Fibers, and the U. S. Postal Service) to process industrial and municipal waste streams into fuel cubes. The program is expected to create new opportunities for industry while conserving valuable landfill space. The fuel cubes are less expensive than coal on a BTU basis and burn cleaner than coal. Materials currently being burned at the site burn pit will also be routed to be made into fuel cubes.

The Green-is-Clean (GIC) shredder is intended to shred both GIC and associated waste as a necessary treatment to allow disposal in a RCRA Subtitle D landfill. An industrial shredder has been purchased and will be installed in the Long-Lived Storage Building during FY99. The GIC shredder is planned to be operational during FY99 and to be used initially to shred the current backlog of GIC waste. After the backlog has been shredded, the GIC Shredder is planned to be used only intermittently to shred any additional GIC waste receipts.

Additional recycling or recovery activities are being pursued to achieve further cost savings. As plans mature, this information will be incorporated into this document.

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Data Source: **EM CDB** Report Number: GEN-01b

Operations/Field Office: Savannah River Print Date: 3/9/2000

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Project SR-SW06 / Sanitary Waste Project

## **Project Description Narratives**

#### Project Status in FY 2006:

Disposal operations continue up to and beyond FY2006, as any operation(s) on-site will continue to produce sanitary waste.

#### Post-2006 Project Scope:

Disposal operations continue beyond FY2006, as any operation(s) on-site will continue to produce sanitary waste.

#### **Project End State**

Sanitary Waste collection and disposal will not reach end state until all missions and activities have ended at the site.

#### **Cost Baseline Comments:**

- a. Escalation included at 2.7%.
- b. Closure of Interim Sanitary Landfill will not be funded by this PBS.

#### Safety & Health Hazards:

There are no hazards identified for this PBS.

#### Safety & Health Work Performance:

Activities and check points are described by the Integrated Management System Description. The conditions and requirements are clearly established and agreed upon prior to the starting of any project and those requirements are contractually binding upon WSRC. The key elements of the WSRC Integrated Safety Program are to define the scope of work, identify and analyze hazards associated with the work, develop and implement hazard controls, perform work within controls, and provide feedback on adequacy of controls and continue to improve safety management. The WSRC Integrated Procedures Management System is the primary mechanism for implementing the objective, principles and functions of the Safety Management System. This system establishes Company-Level, Division-level, and Program-specific procedures consistent with organizational roles, and ensures a consistent, discipline site-wide approach to safety while performing work. The resource description, costs and skill mix are defined in the following Sections: Costs D.2.2 and D.3, FTEs D. 2.5 and 2.7 of this document.

#### **PBS Comments:**

Adequately covered in previous narratives.

#### **Baseline Validation Narrative:**

### General PBS Information

**Project Validated? Date Validated:** 

Has Headquarters reviewed and approved project? No

Dataset Name: FY 1999 Planning Data Page 2 of 6

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Operations/Field Office: Savannah River

Print Date: 3/9/2000

Site Summary Level: Savannah River Site

HQ ID: 0484

Project SR-SW06 / Sanitary Waste Project

### **General PBS Information**

Date Project was Added:12/1/1997Baseline Submission Date:7/3/1999FEDPLAN Project?Yes

CERCLA **DNFSB AEA** DOE Orders **Drivers:** RCRA UMTRCA State Other N Y Ν Ν Ν Y Ν

**Project Identification Information** 

**DOE Project Manager:** William L. Noll III

DOE Project Manager Phone Number:803-725-2219DOE Project Manager Fax Number:803-725-1440

**DOE Project Manager e-mail address:** william.noll@srs.gov

Is this a High Visibility Project (Y/N):

### **Planning Section**

#### **Baseline Costs (in thousands of dollars)**

	1997-2006 Total	2007-2070 Total	1997-2070 Total	1997	Actual 1997	1998	Actual 1998	1999	2000	2001	2002	2003	2004	2005	2006
PBS Baseline (current year dollars)	17,679	46,907	64,586	3,435	3,435	1,664	1,664	2,068	2,156	1,159	1,346	1,504	1,426	1,545	1,376
PBS Baseline (constant 1999 dollars)	16,521	27,608	44,129	3,435	3,435	1,664	1,664	2,068	2,081	1,080	1,221	1,329	1,227	1,294	1,122
PBS EM Baseline (current year dollars)	17,679	46,907	64,586	3,435	3,435	1,664	1,664	2,068	2,156	1,159	1,346	1,504	1,426	1,545	1,376
PBS EM Baseline (constant 1999 dollars)	16,521	27,608	44,129	3,435	3,435	1,664	1,664	2,068	2,081	1,080	1,221	1,329	1,227	1,294	1,122

Dataset Name: FY 1999 Planning Data Page 3 of 6

Data Source: EM CDB Report Number: GEN-01b

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Site Summary Level: Savannah River Site

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Project SR-SW06 / Sanitary Waste Project

	2007	2008	2009	2010	2011- 2015					2036- 2040	2041- 2045	2046- 2050	2051- 2055	2056- 2060	2061- 2065	2066- 2070
PBS Baseline (current year dollars)	1,366	1,474	1,690	1,724	9,414	10,743	12,286	8,210	0	0	) (	0	0	0	0	0
PBS Baseline (constant 1999 dollars)	1,085	1,140	1,272	1,264	6,376	6,368	6,375	3,728	0	0	(	0 (	0	0	0	0
PBS EM Baseline (current year dollars)	1,366	1,474	1,690	1,724	9,414	10,743	12,286	8,210	0	0	) (	0	0	0	0	0
PBS EM Baseline (constant 1999 dollars)	1,085	1,140	1,272	1,264	6,376	6,368	6,375	3,728	0	0	(	0	0 0	0	0	0
Baseline Escalation	Rates															
	1997	1998	1999	2000	2001	2002	2003	3 20	004 2	2005	2006	2007	2008	2009		
	0.00%	0.00%	0.00%	3.60%	3.60%	2.70%	2.70%	2.70	0% 2.7	70%	2.70%	2.70%	2.70%	2.70%		
	2010	2011-2015	2016-2020	2021-2025	2026-2030	2031-2035	2036-2046	0 2041-20	2046-2	050 20	051-2055	2056-2060	2061-2065	2066-2070		
	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	6 2.70	0% 2.7	70%	2.70%	2.70%	2.70%	2.70%		

## **Project Reconciliation**

**Project Completion Date Changes:** 

Previously Projected End Date of Project: 9/1/2032 Current Projected End Date of Project: 9/1/2032 Explanation of Project Completion Date Difference (if applicable):

**Project Cost Estimates (in thousands of dollars)** 

Previously Estimated Lifecycle Cost (1997 - 2070, 1998 Dollars): 43,160 Actual 1997 Cost: 3,435 Actual 1998 Cost: 1,664

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Site Summary Level: Savannah River Site

HQ ID: 0484

Project SR-SW06 / Sanitary Waste Project

**Project Reconciliation** 

Previously Estimated Lifecycle Cost of Project (1999 - 2070, 1998 Dollars): 38,061 Inflation Adjustment (2.7% to convert 1998 to 1999 dollars): 1,028

Previously Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars): 39,089

**Project Cost Changes** 

Cost Adjustments Reconciliation Narratives

**Cost Change Due to Scope Deletions (-):** 

**Cost Reductions Due to Efficiencies (-):** 

Cost Associated with New Scope (+):

Cost Growth Associated with Scope Previously Reported (+): -60 New estimates to go to new disposal site

SR-SW06-001

Cost Reductions Due to Science & Technology Efficiencies (-):

**Subtotal:** 39,029

Additional Amount to Reconcile (+):

Current Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars): 39,030

Milestones

Intersite Milestone/Activity Field Milestone Original **Baseline** Legal **Forecast** Actual EA DNFSB Mgmt. Key Code Date Date Date Date Date Commit. Decision Comp Shredding of Backlog if GIC Waste SR-SW06-026 9/30/1999 9/30/1999 Complete ISL Closure by 4/9/99 SR-SW06-025 6/19/1999 4/5/1999 Project Mission Complete SR-SW06-003 9/1/2032

10/1/1996

Milestones - Part II

Project Start

Milestone/Activity Field Milestone Critical Critial Project Project Mission **Tech** Work Intersite Cancelled Milestone Description Code Decision Closure Path Start End Risk Scope Risk Risk Complete

Comp Shredding of Backlog if SR-SW06-026

GIC Waste

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Project SR-SW06 / Sanitary Waste Project

Milestones - Part II													
Milestone/Activity		Field Milestone Code	Critical Decision	Critial Closure Path	Project Start	Project End	Mission Complete			rsite Canc isk	elled	Milestone Desc	cription
Complete ISL Closure by 4/9/9	99 S	R-SW06-025											
Project Mission Complete	S	R-SW06-003				Y							
Project Start	S	SR-SW06-001			Y								
Performance Measure	Metric	s											
Category/Subcategory	Units			97-2070 Total	Actual Pre-1997	Planned 1997	Actual 1997	Planned 1998	Planned 1999	Planned I 2000	Planned Pl 2001	lanned Plan 2002 2	ned Planne 003 200
MLLW													
Storage	M3												
Category/Subcategory	Units	Planned 2004	Planned 2005	Planned 2006	Planned 2007	Planned 2008	Planned 2009	Planned 2010	Planned 2011 - 2015	Planned 2016 - 2020	Planned 2021 - 2025	Planned 2026 - 2030	Planned 2031 - 2035
MLLW													
Storage	M3				102.40								
Category/Subcategory	Units	Planned 2036 - 2040	Planned 2041 - 2045	Planned 2046 - 2050	Planned 2051 - 2055	Planned 2056 - 2060	Planned 2061 - 2035	Planned 2066 - 2070	Exceptions	Lifecycle Total			
MLLW													
Storage	M3												

Dataset Name: FY 1999 Planning Data Page 6 of 6